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Addressing substance misuse: a missed opportunity in suicide prevention

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Authors:
Dr Nicola J. Kalk - Consultant Psychiatrist, South London and Maudsley NHS Foundation Trust/Clinical Lecturer, National Addiction Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr Michael J. Kelleher - Clinical Lead, Lambeth Addictions Consortium, South London and Maudsley NHS Foundation Trust/Public Health England Advisor Alcohol and Tobacco
Dr Vivienne Curtis – Consultant Psychiatrist, Centralised Place of Safety, South London and Maudsley NHS Foundation Trust/Honorary Consultant Senior Lecturer, Institute of Psychiatry, Psychology and Neuroscience, King's College London
Dr Katherine I. Morley – Senior Lecturer, National Addiction Centre, Institute of Psychiatry, Psychology and Neuroscience, King's College London

Corresponding author: Nicola Kalk, nicola.kalk@kcl.ac.uk

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Public policy on suicide prevention is missing an opportunity to address a major modifiable risk factor for suicide: substance intoxication and misuse. Although national suicide prevention policies acknowledge substance misuse as a risk factor, few include strategies address it.

A recent international systematic review of suicide prevention policy encompassing 10 years of research did not mention interventions targeting substance misuse at all (1). Of the 13 countries included in the review, only nine were found to have a national suicide prevention strategy, seven of which were accessible online. The majority of policies on suicide prevention did not differentiate between alcohol, illicit drug classes, and licit drugs susceptible to misuse, or provide tailored approaches. Thus, while all published national suicide prevention policies listed substance use as a risk factor, only three had policies within the suicide prevention policy specifically addressing substance misuse (2–4). All three policies addressed access to treatment for substance addiction, but two of the three did not refer to specific substances. Only Norway's policy - the most detailed - referred to drug-specific strategies, such as prevention of heroin overdose (3). No national policies, including the recently released consultation draft of a UK suicide prevention strategy (5), currently consider the impact of acute intoxication or advocate the implementation of population measures to reduce substance use as part of suicide reduction.

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Dependence on alcohol and/or illicit drugs is associated with a substantial increase in suicide risk. Alcohol dependence is second only to depression in contributing to the global burden of disability adjusted life years lost to suicide, accounting for around 13% (6). Although psychostimulant and opioid dependence contribute a smaller fraction, the relative risk conferred by dependence on these substances is substantial: 8.2 for psychostimulant dependence and 6.9 for opioid dependence. The relative risk conferred by cocaine dependence specifically is particularly striking: 16.9 (6). These risks are modifiable; engagement with treatment, and length of contact with treatment confers a reduction in risk of suicide in patients who are substance dependent (7).

Dependence alone does not account for all suicide risk attributable to alcohol and drug consumption; acute intoxication is also important. Suicide rates increase with per capita alcohol consumption (8) and are associated with a culture of drinking to intoxication (9). The World Health Organisation (WHO) estimates that every fifth suicide would be prevented if alcohol were not consumed in the population (9). According to an international meta-analysis, acute alcohol intoxication is associated with a six-fold increased risk of suicidal acts (10). A similar effect is observed for sedatives and opioids (11) but the evidence regarding acute stimulant intoxication is mixed (11). Binge consumption, when not played out against a background of alcohol or drug dependence, is less likely to be identified and treated as a clinically relevant problem.

Substance abuse and dependence is a recognised risk factor in patients with comorbid psychiatric diagnoses, which confer increased baseline risk (12). Alcohol use disorder, as evidenced by contact with alcohol services, has been estimated to increase the risk of suicide in people with schizophrenia, bipolar disorder and depression by a factor of two and personality disorder by 2.7 times (13). Other substance use disorders as evidenced by contact with drug services, also increase risk of suicide in patients with schizophrenia, depression and personality disorder by two to three times (13). There is little evidence regarding the impact on suicide risk of less severe forms of substance use that may not come to the attention of specialist providers. A single study found patients with mood disorder who attempted suicide while intoxicated with alcohol were likely to use more lethal means than those who were not (14).

The WHO advocates population approaches to reducing alcohol consumption in its suicide prevention strategy (9). There is international evidence that population level alcohol policies reduce suicide in men in general (increasing alcohol prices through taxation or other means, reducing outlet density), and in young men (raised minimum legal drinking and no-tolerance drink-driving laws) (15). Such policies do not appear to affect suicide in women. It is not clear how such population-level approaches could be designed or implemented for illicit drugs, as restriction already exists in the form of criminalisation.

National suicide prevention policies need to include strategies that explicitly address risk associated with both acute drug and alcohol intoxication, as well as dependence. This should incorporate overall improvement in access to addiction services, development of strategies that address risks particular to different substances, and public education regarding the increased risk of suicide associated with both acute intoxication and chronic use. Intoxicated patients should not be excluded from appropriate psychiatric care when in

crisis (16). Strategies to reduce the availability of alcohol should be incorporated more widely. Given the strength of association between drug and alcohol use and suicide risk, suicide prevention strategies that do not address this cannot be considered comprehensive.

Suicide prevention policies need to consider individual-level strategies as well as population-level strategies. Within substance use services, suicide risk assessment is not always routine and information about mental health comorbidity is not routinely collected (17). Structured risk assessment has been criticised for having limited predictive power (18, 19) and alienating patients if not undertaken sensitively. However, such information is useful in, for example, determining decisions regarding medication supervision and should be explicitly recommended.

Suicide risk associated with acute intoxication should also be considered, but there is a dearth of research on which to base policy. Our clinical experience is that acute intoxication is a dynamic risk factor and suicidality often subsides as intoxication resolves, but medium-term risk and what constitutes appropriate onward care for such patients is unclear. Acutely intoxicated individuals are not all dependent or suffering from a substance use disorder that is severe enough to meet the threshold for specialist addictions care (16, 17). If we do not develop pathways for such patients, particularly those who engage in recurrent suicidal acts, we will miss an important opportunity for preventing suicide.

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